





## Science Landscape Seminar Series: Representative UK Life Sciences and Medical Infrastructure

### Notes to reader

This document is to inform discussion only and is subject to the following caveats:

- Inclusion, non-inclusion or otherwise is not intended to reflect on the standing of any organisation or infrastructure.
- We did not include classified defence and intelligence assets.
- We have restricted this document to including life sciences and medical research in support of human health.
- Assignment of Research Areas, Eight Great Technologies and Industrial Strategy sectors was based on desk research and may be subject to error. Categories are designed to inform the general discussion and not reflect on individual organisations or infrastructure. Absence of icons in category tables indicates that (in the project team's opinion) a piece of infrastructure cannot be easily categorised.
- If any mistakes have been made, please inform the seminar secretariat on [cstinfo@go-science.gsi.gov.uk](mailto:cstinfo@go-science.gsi.gov.uk).

## Logo Key

Location		Research Area	Eight Great Technologies	Industrial Strategy
 UK		 Arts and humanities	 Energy Storage	 Life Science
 EU		 Biological and medical sciences	 Big Data	 Aerospace
 Global		 Earth sciences	 Satellites	 Professional Business Services
		 Engineering	 Robotics and Autonomous Systems	 Education
<b>Funding</b>				
 Research Councils		 Physical, mathematical and computer sciences	 Synthetic Biology	 Nuclear
 Departmental		 Social and economic sciences	 Regenerative Medicine	 Oil and Gas
 Private Sector			 Agri-Science	 Automotive
 Charity			 Advanced Materials	 Offshore Wind
 Academic			 Quantum Technologies	 Information Economy
 European				 Construction
				 Agri-tech

## **List of Infrastructure**

*The infrastructure identified has been categorised in to the lists below. There will be instances when items could fit in to multiple lists and in these cases we have tried to place the infrastructure in the most appropriate list.*

## **Collaborative Research Centres and Institutes**

*Centres and institutions that represent collaboration between more than one organisation.*

Babraham Institute (and Babraham Research Campus)  
BBSRC Institutes  
Bristol Centre for Synthetic Biology  
Dementias Platform UK  
EPSRC Centres for Innovative Manufacturing  
Francis Crick Institute  
Farr Institute  
IKC in Regenerative Therapies and Devices (Leeds University)  
Institute of Public Health  
Interdisciplinary Research Collaborations (IRCs)  
Innogen Institute  
LLHW Centre for Cognitive Ageing and Cognitive Epidemiology  
MRC/UVRI Uganda Research Unit on Aids  
MRC Units, Institutes & Centres  
National Institute for Health Research Infrastructure  
NIHR Office for Clinical Research Infrastructure  
Oxford Institute for Radiation Oncology  
Research, Innovation, Learning and Development (RILD), Exeter  
Roslin Institute (University of Edinburgh)

## **Industry**

AstraZeneca  
Baxter  
GSK  
Johnson & Johnson  
Novartis UK  
Pfizer  
Roche Diagnostics  
Roche Pharmaceuticals

## **Charities**

Alzheimer's Research UK  
Arthritis Research  
Association of Medical Research Charities  
Bill and Melinda Gates Foundation  
British Heart Foundation  
Cancer Research UK  
Marie Curie  
Nuffield Trust  
Parkinson's UK  
The King's Fund  
Wellcome Trust  
Wellcome Trust (Sanger Institute)

## **National Bodies and Organisations**

Cell Therapy Catapult  
Centres for Doctoral Training  
Doctoral Training Partnerships  
Health and Social Care Information Centre (HSCIC)  
Innovate UK  
International Centre for Lifecourse Studies (ICLS)  
Institute of Food Research  
Precision Medicine Catapult  
Public Health England  
The National Institute for Health and Care Excellence (NICE)  
UK Regenerative Medicine Platform

## **Cohort Studies and Data**

ALSPAC  
Care.data  
Centre for Longitudinal Studies  
Clinical Practice Research Datalink (CPRD)  
Cohort and Longitudinal Studies Enhancement Resources (CLOSER)  
Genomics England  
MRC Cohort investments  
NIHR Dementia Clinical Record Interactive Search (D-CRIS)  
NIHR Healthcare Informatics Collaborative (HIC)  
UK Clinical Research Network  
UK Data Service  
UK Longitudinal Studies Centre

## **Regulators**

Human Fertilisation and Embryology Authority  
Human Tissue Authority  
Medicines and Health Products Regulatory Agency

## **Learned Societies**

Academy of Medical Sciences  
Royal Society

## **Funding Initiatives**

Clinical Research Infrastructure Initiative  
MRC-Industry Asset Sharing Initiative  
Next generation optical microscopy initiative  
Medical Bioinformatics Initiative Investments

## **Leadership Forums and Networks**

*These are groups and networks, which help facilitate and co-ordinate materials research*

Association of the British Pharmaceutical Industry (ABPI)  
Association of British Healthcare Industries (ABHI)  
Bioindustry Association  
British Healthcare Trades Association  
British Medical Association  
Faculty of Medical Leadership and Management  
Health Research Authority  
London Regenerative Medicine Network  
Medilink  
NIHR Clinical Research Network  
National Institute for Biological Standards and Control  
One Nucleus  
Royal College of Nursing  
Royal College of Physicians  
The Scientific and Medical Network

**National Facilities and Equipment** - *These are facilities, which either exist for the use of national bodies or are available for the general use of the academic community.*

Academic Health Science Centres  
Academic Health Science Networks  
Biocity  
Biomedical Research Centres and Units  
Central Laser Facility at RAL  
Diamond Light Source  
High-Throughput Sequencing Hubs at Edinburgh and Liverpool  
Imanova  
Medcity  
MRC-NIHR National Phenome Centre  
MRC-Wellcome Trust Human Developmental Biology Resource  
NIHR National Biosample Centre  
NIHR BioResource  
Stratified Medicine Consortia  
UK Biobank  
UK Brain Banks Network  
UK DNA Banking Network  
UK Science Parks Association  
UK Stem Cell Bank

## **International Facilities**

*Facilities which are either partly funded by UK institutions or important to UK research.*







ELIXIR  
European Bioinformatics Institute  
ESRF European Synchrotron Radiation Facility

## **Collaborative Research Centres and Institutes**

### **Babraham Institute (and Babraham Research Campus)**



The Babraham Institute is located at the heart of the Babraham Research Campus. Its emphasis is on healthy ageing through the human lifecycle. Research into ageing is carried out across the Institute's four programme areas: epigenetics; signalling; lymphocyte signalling and development; and nuclear dynamics. These work in close collaboration with each other. [More info: <http://www.babraham.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  European  Charity	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

### **Biotechnology and Biological Sciences Research Council**

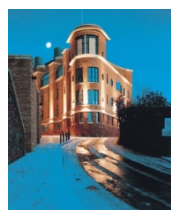


The BBSRC are funded by the Government's Department for Business, Innovation and Skills (BIS). Their budget for 2013-14 is around £484m, and they support around 1600 scientists and 2000 research students in universities and institutes across the UK







and provide strategic funding to 8 institutes. The institutes' research underpins key sectors of the UK economy such as agriculture, bioenergy, biotechnology, food and drink and pharmaceuticals. In addition, the institutes maintain unique research facilities of national importance. [More info: <http://www.bbsrc.ac.uk/about/institutes/institutes-index.aspx>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Departmental	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

### **Bristol Centre for Synthetic Biology**



Set up in 2014 to bring together scientists from a range of different research backgrounds, the Bristol Centre for Synthetic Biology aims to develop new antibiotics, assemble virus-like particles to present new routes to vaccines, build simple cells from scratch, use red blood cells to deliver complex molecules like anti-cancer drugs directly to tumours and reprogram bacteria to perform useful tasks like sensing environmental pollutants. [More info: <http://www.bristol.ac.uk/news/2014/january/10105.html> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Biological and medical sciences	 Synthetic Biology	 Life Sciences







## Dementias Platform UK (DPUK)



The MRC DPUK is a multi-million pound public-private partnership, developed and led by the Medical Research Council, to accelerate progress in, and open up, dementias research. The DPUK's aims are early detection, improved

treatment and ultimately, prevention, of dementias. The platform has been supplemented by a £37m investment from the 2014 CRI initiative. [More info:

<http://www.dementiasplatform.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Private Sector	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## EPSRC Centres for Innovative Manufacturing



The EPSRC Centres for Innovative Manufacturing aim to maximise the impact of innovative research for the UK, supporting existing industries and opening up new industries and markets in growth areas. Each Centre receives five years of funding to retain staff, develop collaborations, carry out feasibility studies, and support up to two research projects. There are currently 2 Centres of relevance to

the meditech sector:

- EPSRC Centre for Innovative Manufacturing in Medical Devices led by Leeds
- EPSRC Centre for Innovative Manufacturing in Regenerative Medicine led by Loughborough

[More info: <http://www.epsrc.ac.uk/research/centres/innovativemanufacturing/> ]









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 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## Francis Crick Institute



Due to open in 2015, the Francis Crick Institute will be an inter-disciplinary medical research institute. Its work will explore why disease develops and find new ways to treat, diagnose and prevent illnesses such as cancer, heart disease and stroke, infections, and neurodegenerative diseases. [More info:

<http://www.crick.ac.uk/> ]

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## Farr Institute



The Farr Institute of Health Informatics Research comprises four nodes distributed across the UK. With a £17.5m research award from a 10-funder consortium, plus £20m capital from the Medical Research Council, the Institute aims to deliver high-

quality research linking electronic health data with other forms of research and routinely collected data and build capacity in health informatics research. [More info:

<http://www.farrinstitute.org/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy	
 UK	 Research Councils	 Academic	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Innovation and Knowledge Centres at Leeds University and Imperial College










Engineering and Physical Sciences  
Research Council

Innovation and Knowledge Centres (IKCs) are a key component of the UK's approach to the commercialisation of emerging technologies through creating early stage critical mass in an area of disruptive technology. They are able to achieve this through their international quality research

capability and access to the companion technologies needed to commercialise research.

EPSRC has 2 Innovation and Knowledge Centres (IKC) which relate specifically to Meditech:

- Leeds University – regenerative therapy and devices
- Imperial College – synthetic biology

Location	Funding			Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Academic	 Departmental	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## University of Cambridge Institute of Public Health



The Institute is a multidisciplinary partnership of academics and public health professionals, based at the University of Cambridge School of Clinical Medicine. Members carry out research in public health and population sciences, educate scientists and public health leaders, and analyse and interpret population health evidence and data for policy makers and those working in public health. Membership includes representatives from the University, Public Health England and the

Medical Research Council. The Institute also houses the MRC Biostatistics unit. [More info: <http://www.iph.cam.ac.uk/> ]

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## Interdisciplinary Research Collaborations (IRCs)



Interdisciplinary Research Collaborations (IRCs) are centres of internationally-acknowledged scientific and technological excellence, with sufficient critical mass to make a real impact in areas of key future industrial relevance to the UK. The collaborations are funded through large, long-term grants, typically around £10 million over six years. IRCs generally involve several universities together with

industrial partners. Current EPSRC IRCs are:

- IRC 'SPHERE' – a Sensor platform for Healthcare in a Residential Environment led by Bristol
- Multiplexed 'Touch and Tell' Optical Molecular Sensing and Imaging led by Edinburgh
- IRC in Early-Warning Sensing Systems for Infectious Diseases led by UCL

[More info: <http://www.epsrc.ac.uk/funding/howtoapply/routes/capacity/ircs/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Biological and medical sciences		 Life Sciences

## Innogen Institute



Launched in 2013, the Innogen Institute is a collaboration between the University of Edinburgh and the Open University that explores the social and economic impact of innovation in the life sciences. They particularly focus on:

- Emerging Technologies
- Agriculture and Environment
- Global health and development
- Innovation systems
- Life Science governance and engagement

[More info: <http://www.innogen.ac.uk/> ]







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 UK	 Research Councils  Academic	 Social and economic sciences		 Life Sciences

## LLHW Centre for Cognitive Ageing and Cognitive Epidemiology



Based at the University of Edinburgh, the Centre's mission is to provide information to prevent or ameliorate cognitive disability; to determine the mechanisms by which lower cognitive ability through the lifecourse renders the body vulnerable to ill health and impaired wellbeing; and to provide an environment for

interdisciplinary research training in cognitive ageing and cognitive epidemiology. CCACE aims to maintain, develop and exploit the long-term human cohort studies assembled in Scotland to explore lifecourse influences on cognitive ageing and pathways whereby cognitive ability in early life affects later health. [More info: <http://www.ccace.ed.ac.uk/>]








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## MRC/Uganda Virus Research Institute Uganda Research Unit on AIDS



The MRC/UVRI Uganda Research Unit on AIDS is a centre for research on HIV infection and related diseases, contributing knowledge on the epidemic, the evaluation of innovative health

care options, treatment and prevention, and the development of health policy and practice in Africa and worldwide.

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Research Councils	 Biological and medical sciences  Social and economic sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

## MRC Units, institutes & Centres






Although some are mentioned individually, the MRC also supports many other units, institutes and centres. These are defined as follows:

- Institutes – very long-term flexible multidisciplinary investments
- Units – more focused investments established for as long as needed to support a scientific need and/or deliver a research vision
- Centres – build on existing MRC, and other, support to add value and help establish a centre of excellence.

All three are mission-focused and carry out research including innovative methodology and technology development. Currently there are 3 Institutes, 27 Units and 24 Centres.

[For a full list and more information see: <http://www.mrc.ac.uk/about/institutes-units-centres/>]





Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils			 Life Sciences

## National Institute for Health Research Infrastructure

### National Institute for Health Research

The National Institute for Health Research (NIHR) is an integrated health research system in the NHS (England). The NIHR funds and supports a wide range of early translational (experimental medicine), clinical and applied health research infrastructure. NIHR infrastructure seeks to optimise the pathway for new treatments, technologies, diagnostics and other interventions, as well as stimulating economic growth through the support of a strong life sciences industry. This infrastructure includes:

- **NIHR Biomedical Research Centres and Units (BRCs/BRUs)** – Partnerships between England's leading NHS organisations and universities which translate laboratory-based discoveries into new cutting-edge treatments, technologies, diagnostics and other interventions in clinical settings.
- **NIHR Clinical Research Facilities (CRFs)** – Purpose-built facilities that support world-class experimental medicine research to translate scientific advances into benefits for patients.
- **NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs)** – CLAHRCs focus on applied health research at the second translational gap.
- **NIHR Diagnostic Evidence Cooperatives (DECs)** – DECs are centres of expertise which catalyse the generation of evidence on IVDs that is required by the NHS and IVD manufacturers, enabling patients to access the most appropriate treatments more quickly and help the NHS make the best use of resources.
- **NIHR/CRUK Experimental Cancer Medicine Centres (ECMCs)** – ECMCs are based in England and bring together laboratory and clinical patient-based research to speed up the development of new therapies and individualise patient treatment.
- **NIHR Health Technology Cooperatives (HTCs)** – HTCs address clinical areas or themes of high morbidity and unmet need for NHS patients and healthcare technology users.
- **NIHR Patient Safety Translational Research Centres (PSTRCs)** – PSTRCs' roles include taking new theoretical models or paradigms and applying these to the context of service delivery within the NHS in order to demonstrate proof of concept and principle.
- **NIHR Dementia Translational Research Collaboration (TRC-D)** – Created to maximise the significant NIHR investment in dementia translational research. The TRC-D brings together the world-leading expertise and resources within the four NIHR BRUs in dementia and the six NIHR BRCs.
- **NIHR Rare Diseases Translational Research Collaboration (RD-TRC)** – RD-TRC consists of BRCs, BRUs and CFRs, all with world-leading research expertise into rare disease, facilities and capacity. The RD-TRC provides national coordination to increase research collaboration and speed up translation, as well as to build on the UK's role as a global leader in genomics.

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences







## NIHR Office for Clinical Research Infrastructure

### NOCRI

NIHR Office for  
Clinical Research  
Infrastructure

The NIHR Office for Clinical Research Infrastructure (NOCRI) was been set up to help public, charity and industry research funders work in partnership with NIHR infrastructure. NOCRI's role is to: champion and support cross-infrastructure working, strengthen relationships between the NIHR, the NHS and other key stakeholders, promote and enhance the nation's reputation as a world-class centre for applied clinical research and maximise the impact of the NIHR as a whole, by leading work to shorten the time it takes to develop new therapies and medical technologies. [More info:

<http://www.nihr.ac.uk/about/nihr-office-for-clinical-research-infrastructure.htm>]








Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental  Private Sector  Charity	 Biological and medical sciences		 Life Sciences

## Oxford Institute for Radiation Oncology



The Institute has been created as a centre for radiation biology research. Embedded within the Department of Oncology, University of Oxford, the Institute's mission is to explore aspects of radiation biology that could yield new advances in the treatment of cancer. In particular, it aims to integrate basic research with imaging science to advance radiation therapy and enable earlier detection of secondary cancers. [More info:

<http://www.rob.ox.ac.uk/> ]






Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic  Charity	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Research, Innovation, Learning and Development (RILD), Exeter



The RILD building, which opened in January 2014, is a £27.5m development which consists of the Wellcome Wolfson Centre for Medical Research, the National Institute for Health Research (NIHR) Exeter Clinical Research Facility, and a new Post Graduate Education Centre on the Royal Devon and Exeter Hospital (Wonford) site in Exeter. Through the CRI initiative, a further £1.7m has been invested here in the latest DNA sequencing technology. [More info:

<http://www.exeter.ac.uk/campuservices/eds/projects/rild/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Research Councils		 Synthetic Biology	 Life Sciences

## Roslin Institute (University of Edinburgh)









The Roslin Institute aims to gain fundamental understanding of genetic, cellular, organ and systems bioscience underpinning common mechanisms of animal development and pathology. It is an important contributor to biomedical research infrastructure through three of the

institute's six key objectives:

- Enhance food safety by understanding interactions between disease causing organisms and animals.
- Enhance human health through an understanding of basic mechanisms of health and disease and comparative biology of animal species.
- Identify of new and emerging zoonoses and understand how pathogens might cross from animals to humans.

[More info: <http://www.roslin.ed.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Research Councils	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Industry

### AstraZeneca



Globally, AstraZeneca's R&D focus is on six key therapeutic areas: cancer, infection, cardiovascular diseases and diabetes, gastrointestinal, neuroscience and respiratory. The UK is a major centre of research into, and development of, new medicines. R&D employees are based across Alderley Park and Macclesfield in Cheshire, MedImmune in Cambridge and the Brixham site in Devon. [More info: <http://www.astrazeneca.co.uk/home/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

### Baxter



Baxter's principal areas of strategic focus for R&D include recombinant and plasma-based therapeutics, vaccines, biosurgery, kidney dialysis, the formulation of small molecule drugs, enhanced packaging and infusion systems for medication delivery, as well as parenteral nutrition. A focus of Baxter's R&D pipeline is on products and therapies that have the potential to satisfy unmet clinical needs by improving earlier diagnosis, prevention and treatment and providing new, unrecognized solutions. [More info: <http://www.baxterhealthcare.co.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

### GSK



GlaxoSmithKline are a science-led global healthcare company whose mission is to improve the quality of human life by enabling people to do more, feel better and live longer. Their focus is across pharmaceuticals, vaccines and consumer health care. In 2013 they invested £3.4 billion to develop new medicines, vaccines and consumer products. [More info: <http://www.gsk.com/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences



## Johnson & Johnson



Johnson and Johnson were founded in 1886 in New Jersey, US. They employ over 125,000 globally. In 2013 pharmaceuticals and medical devices and diagnostics made up 79% of their total revenues. The company's major franchises in the Pharmaceutical segment include Immunology, Neuroscience, Infectious Disease, and Oncology. [More info: <http://www.jnj.com/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Novartis UK



Novartis UK is the UK affiliate of Swiss-based Novartis AG. Its healthcare portfolio includes innovative medicines, eye care, generic pharmaceuticals, preventative vaccines and over-the-counter products.

In the UK, Novartis employs over 2000 people across six sites, including Novartis UK headquarters in Frimley, Surrey. These sites are responsible for the development, sales, marketing and manufacturing of products used in the UK and worldwide. [More info: <http://www.novartis.co.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Pfizer



Pfizer is a major supplier of medicines to the NHS. Their global healthcare portfolio includes medicines and vaccines, and consumer healthcare products. Pfizer collaborates with healthcare providers, governments and local communities to support and expand access to reliable, affordable healthcare around the world. [More info:

<http://www.pfizer.co.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Roche Diagnostics



*Diagnostics*

The diagnostics branch of the Swiss base Roche has a comprehensive portfolio of products and research development. They have four main areas of diagnostics: professional, molecular, tissue and diabetes care. Roche invest around 9 billion Swiss francs in research and development each year. They employ over 86,000 people across 120 countries. [More info: <http://roche-diagnostics.com/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Roche Pharmaceuticals



Roche Pharmaceuticals is a Swiss based company that have a history in pharmaceuticals going back 120 years. Roche invest around 9bn Swiss francs in research and development each year. They employ over 86,000 people across 120 countries. Roche has a broad research base, working on oncology, neuroscience, infectious diseases, immunology, research technologies, and cardiovascular and metabolism. [More info: <http://www.roche.com/index.htm> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Life Sciences



## Charities

### Alzheimer's Research UK



Alzheimer's Research UK is Britain's leading dementia research charity, founded in 1992 as the Alzheimer's Research Trust. Its activities include funding scientific studies into the prevention, treatment and cure of Alzheimer's disease, vascular dementia, Lewy Body disease and fronto-temporal dementia. The charity

relies on donations from individuals, companies and charitable trusts. [More info:

<http://www.alzheimersresearchuk.org/> ]

Location	Funding	Research area		Eight Great	Industrial Strategy
 UK	 Charity	 Biological and medical sciences	 Social and economic sciences	 Synthetic Biology	 Life Sciences

### Arthritis Research UK



Arthritis Research UK is a medical research charity dedicated to reducing the pain and disability resulting from arthritis. Their activities include: funding research into causes, treatments and cures for arthritis; educating and informing on aspects of arthritis; campaigning for treatment; support of patients; and working in partnerships to make a difference to those with the



disease. [More info: <http://www.arthritisresearchuk.org/> ]

Location	Funding	Research area		Eight Great	Industrial Strategy
 UK	 Charity	 Biological and medical sciences	 Social and economic sciences	 Synthetic Biology	 Life Sciences

### Association of Medical Research Charities (AMRC)



The AMRC is the national membership organisation of leading medical and health research charities. AMRC members support over a third of all publicly funded medical research in the UK and, in 2013, AMRC's members invested over £1.3 billion in health research. AMRC provide training and guidance and interpret the political and legislative environment for their members to ensure that they are delivering high-quality research to improve health and well-being for all. [More info: <http://www.amrc.org.uk/> ]

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## Bill and Melinda Gates Foundation



Founded in 2000, the Bill and Melinda Gates Foundation is based in Seattle, Washington. The foundation employs 1227 people globally and since inception has made in excess of \$31.6 billion in grant payments. The Foundation's focus is on people leading healthy and productive lives. In developing countries this focuses on improving health and enabling poverty alleviation and in the US, on ensuring equality of access to opportunities to succeed in school and life. [More info: <http://www.gatesfoundation.org/> ]

Location	Funding	Research area		Eight Great	Industrial Strategy	
 Global	 Charity	 Biological and medical sciences	 Social and economic sciences	 Synthetic Biology	 Life Sciences	 Education

## British Heart Foundation



The British Heart Foundation is the UK's largest independent funder of cardiovascular research. Founded in 1961, the BHF has also been dedicated to providing information to help reduce heart disease risks, campaigning to establish policies to help minimise heart disease risk, achieving high standards of care for patients, and reducing the level of inequality in heart disease distribution. [More info: <http://www.bhf.org.uk/> ]

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## Cancer Research UK



Cancer Research UK is the world's largest independent cancer research charity. It aims to reduce deaths from cancer through research into the prevention, diagnosis and treatment of cancer. Cancer Research UK also develops evidence-based policy to inform government decisions related to the disease, and a strong engagement programme with key decision-makers.

[More info: <http://www.cancerresearchuk.org/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
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## Marie Curie



Marie Curie Cancer Care was founded in 1948 and is a charity focused on alleviating suffering caused by cancer. The Charity is dedicated to enabling end of life care to be available to people at home and in their hospices rather than in hospitals. Marie Curie is one of the UK's leading funders in palliative care research, awarding grants of around £1 million a year. [More info: <https://www.mariecurie.org.uk/> ]

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## Nuffield Trust



The Nuffield Trust was founded in 1940 and is an independent source of evidence-based research and policy analysis for improving health care in the UK. They have four key activities: conducting cutting edge research, informing

and generating debate, supporting leaders and examining international best practice. [More info: <http://www.nuffieldtrust.org.uk/> ]




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## Parkinson's UK



As the largest charity funder of Parkinson's research in Britain, Parkinson's UK has so far invested over £65m in research to advance the understanding of Parkinson's Disease and its causes, and also in improving treatment. As well as research they provide support to Parkinson's sufferers and their families and campaign to ensure those with the disease have access to high quality health

and social care. [More info: <http://www.parkinsons.org.uk/> ]

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## The King's Fund



The King's Fund is an independent charity and think tank that works to improve health and health care in England. They help to shape policy and practice through research and analysis, develop teams and organisations, promote understanding of the health and social care system and bring people together to learn, share knowledge and debate. [More info: <http://www.kingsfund.org.uk/> ]

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## Wellcome Trust

**wellcome**trust

The Wellcome trust is a global charitable foundation dedicated to achieving improvements in human and animal health. Their aim is to support the brightest minds in biomedical research and the medical humanities. Their breadth of support includes public engagement, education and the application of research to improve health.

[More info: <http://www.wellcome.ac.uk>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Charity	 Biological and medical sciences  Social and economic sciences		

## Wellcome Trust (Sanger Institute)



Established in 1992 as the Sanger Centre, the Wellcome Trust Sanger Institute is a non-profit genomics and genetics research institute primarily funded by the Wellcome Trust. The Institute employs around 900 people to engage in four main areas of research: human

genetics, pathogen genetics, mouse and zebrafish genetics, and bioinformatics. [More info: <http://www.sanger.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
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## National Bodies and Organisations

### The Cell Therapy Catapult



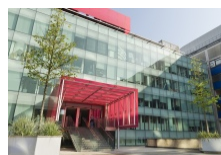
The Cell Therapy Catapult is part of a family of Catapults which are not-for profit, independent centres which connect businesses with the UK's research and academic communities. The Cell Therapy Catapult, supported by Innovate UK, was established in 2012 with the core aim of making the UK into a global leader

in the development, delivery and commercialisation of cell therapy.

[More info: <https://ct.catapult.org.uk/who-we-are>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

### Centres for Doctoral Training (CDTs)



Based at universities around the country, CDTs provide training for students within focused research areas, often defined strategically by the Research Council funder(s) from the outset. Centres can be focused on academic or industrially relevant research topics, or a mix of both. An example of a relevant CDT is the Chemical Biology Training Centre at

Imperial College London.

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Biological and medical sciences  Social and economic sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences  Education

### Doctoral Training Partnerships



Partnerships provide training for students across a broad range of subjects determined by a Research Organisation or consortia of Research Organisations. Partnerships involve strategic engagement between the Research Organisation(s) and the Research Council funder(s) in developing the overall programme of training.

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Biological and medical sciences  Social and economic sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences  Education

## Health and Social Care Information Centre (HSCIC)



Health & Social Care  
Information Centre

The Health and Social Care Information Centre (HSCIC) is the national provider of information, data and IT systems for commissioners, analysts and clinicians in health and social care. The Centre was set up as an executive non-departmental public body (NDPB) in April 2013 and employs 2,500 staff, mostly IT specialists, programme and project managers, statisticians, analysts and information security experts. [More info: <http://www.hscic.gov.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Biological and medical sciences  Social and economic sciences		 Life Sciences  Education

## Innovate UK (formerly the Technology Strategy Board)



Technology Strategy Board

Innovate UK is a non-departmental public body whose purpose is to accelerate economic growth in the UK by stimulating business-led innovation. They support, fund and connect innovative British businesses. Innovate UK run a Knowledge Transfer Network, and their online collaboration “network \_connect” enables its 90,000 users to build relationships and work together. [More info: <http://www.gov.uk/government/organisations/innovate-uk> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences	All	All

## International Centre for Lifecourse Studies (ICLS)



The International Centre for Lifecourse Studies in Society and Health was set up in 2008 to conduct original research integrating social and biological knowledge in four substantive areas:

- Well-being in childhood and adolescence;
- Work, health and well-being;
- Social influences on successful ageing;
- The social-biological interface

[More info: <http://www.ucl.ac.uk/icls/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences  Social and economic sciences		 Life Sciences











## Institute of Food Research (IFR)



The Institute of Food Research (IFR) is a publicly funded UK research institute that focuses on the underlying science of food and health to address the global challenges of Food Security, Diet & Health, Healthy Ageing and Food Waste. IFR's mission is to be an international leader in research that addresses the fundamental relationships between food and health, food and the gut and the

sustainability of the food chain in order to further the production of safe, healthy foods. [More info: <http://www.ifr.ac.uk/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Departmental  European  Charity	 Biological and medical sciences	 Agri-Science	 Agri-tech

## Precision Medicine Catapult



Innovate UK has designed, and is now setting up a Catapult focused on precision medicine. Precision medicine, which uses diagnostic tests to select the most appropriate treatment for individual patients, is widely recognised as the new way to develop healthcare, and

the Catapult will aim to drive the shift towards precision medicine by making commercialisation easier in the UK. As a trusted neutral party, it will help businesses by offering a critical mass of multidisciplinary expertise, infrastructure and services. [More info: <http://www.catapult.org.uk/precision-medicine>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		Life science

## Public Health England



PHE is an executive agency, sponsored by the Department of Health. Their role is to protect and improve the nation's health and wellbeing, and reduce health inequalities. PHE employs 5000 staff, mostly scientists, researchers and public health professionals. [More info: <http://www.gov.uk/government/organisations/public-health-england>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		

## The National Institute for Health and Care Excellence (NICE)



NICE was set up to reduce variation in the availability and quality of NHS treatments and care. NICE provides national guidance and advice to improve health and

social care in England. As an NDPB, it is accountable to its sponsor department, the Department of Health, but is operationally independent of government. [More info:

<http://www.nice.org.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		

## UK Regenerative Medicine Platform



UK Regenerative  
Medicine Platform

BBSRC, EPSRC and MRC have together established the UK Regenerative Medicine Platform (UKRMP) with the aim of:

- establishing interdisciplinary research hubs to address knowledge-gaps in the translation of stem cell and regenerative biology towards application;
- providing tools, platform technologies and engineering solutions needed for therapeutic development;
- creating a world-leading and fully connected national programme to pull through excellent discovery science in support of the commercial development and clinical delivery of regenerative medicine products.

[More info: <http://www.ukrmp.org.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences



## Cohort Studies and Data








### Avon Longitudinal Study of Parents and Children (ALSPAC)



Avon Longitudinal Study of Parents and Children

children arising from the pregnancy, and their partners have been followed up intensively over two decades. [More info: <http://www.bristol.ac.uk/alspac/> ]

Based at the University of Bristol, ALSPAC, also known as Children of the 90s, is a world-leading birth cohort study. Between April 1991 and December 1992 they recruited more than 14,000 pregnant women into the study and these women (some of whom had two pregnancies or multiple births during the recruitment period), the children arising from the pregnancy, and their partners have been followed up intensively over two decades. [More info: <http://www.bristol.ac.uk/alspac/> ]




Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Charity  Academic	 Biological and medical sciences  Social and economic sciences		 Life Sciences

### Care.data



care.data

NHS England is commissioning a modern data service from the Health and Social Care Information Centre (HSCIC) on behalf of the entire health and social care system. Known as care.data, this programme will build on existing data services and expand them to provide linked data that will eventually cover all care settings, both in and outside of hospital. [More info: <http://www.england.nhs.uk/ourwork/tsd/care-data/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental		 Big Data	

### Centre for Longitudinal Studies (CLS)



The Centre for Longitudinal Studies (CLS) is an Economic and Social Research Council resource centre. It is based at the Department for Quantitative Social Science, Institute of Education, University of London. CLS is responsible for running three of Britain's internationally-renowned birth cohort studies: 1958 National Child Development Study (NCDS), the 1970 British Cohort Study

(BCS70), and the Millennium Cohort Study (MCS). [More info: <http://www.cls.ioe.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Departmental	 Social and economic sciences		 Life Sciences

## Clinical Practice Research Datalink (CPRD)



The Clinical Practice Research Datalink (CPRD) is the new English NHS observational data and interventional research service, jointly funded by the NHS National Institute for Health Research (NIHR) and the Medicines and Healthcare products Regulatory Agency (MHRA). CPRD services are designed to maximise the way

anonymised NHS clinical data can be linked to enable many types of observational research and deliver research outputs that are beneficial to improving and safeguarding public health.

[More info: <http://www.cprd.com/news/default.asp>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences	 Big Data	Life science

## Cohort and Longitudinal Studies Enhancement Resources (CLOSER)



CLOSER (Cohort and Longitudinal Studies Enhancement Resources) aims to maximise the use, value and impact of some of the UK largest and longest-running longitudinal studies, both at home and abroad. Bringing together nine leading studies, the British Library and the UK Data Service, CLOSER works to stimulate interdisciplinary research, develop shared resources, provide training, and share expertise. In this

way CLOSER is helping to build the body of knowledge on how life in the UK is changing – both across generations and in comparison to the rest of the world. [More info:

<http://www.closer.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Social and economic sciences	 Big Data	 Life Sciences

## Genomics England



Genomics England was set up by the Department of Health to deliver the 100,000 Genomes Project. Initially the focus will be on rare disease, cancer and infectious disease. The project is currently in its pilot phase and will be completed by the end of 2017. [More info: <http://www.genomicsengland.co.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## NIHR Dementia Clinical Record Interactive Search (D-CRIS)



The Dementia Clinical Record Interactive Search (D-CRIS) is a world-leading resource that enables large patient datasets to be pooled and returns anonymised datasets appropriate for research use. This means that dementia research can be conducted at scale, enabling researchers to identify

trends in the data and investigate why treatments work for some patients and are not as effective for others. The aim of this work is to increase the speed with which the results from research initiatives can deliver value to direct patient care and improve the close working relationship between practising clinicians and academics. [More info: <http://www.nihr.ac.uk/about/D-CRIS>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## NIHR Healthcare Informatics Collaborative (HIC)



The NIHR Health Informatics Collaborative (HIC) was set up to deliver high quality data in five key therapeutic areas: acute coronary syndromes; ovarian cancer; hepatitis; renal transplantation; and intensive care. The five areas reflect emerging health priorities as well as the scientific expertise of

five of the largest university hospital trusts participating in the Collaborative, each of which hosts a large NIHR Biomedical Research Centre (BRC) in partnership with their academic institution. [More info: <http://www.nihr.ac.uk/about/hic.htm>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences




## UK Data Service

UK Data Service



The UK Data Service is a data resource to support researchers, teachers and policymakers who depend on high-quality social and economic data. The service provides a single point of access to a wide range of secondary data (including large-scale government surveys, international macrodata, business microdata, qualitative studies and census data from 1971 to 2011) backed with extensive support, training and guidance to meet the needs of data



users, owners and creators. The service promotes data sharing to encourage the reuse of data, and provides expertise in developing best practice for research data management. [More info: <http://ukdataservice.ac.uk/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils		 Big Data	

## UK Longitudinal Studies Centre



The UK Longitudinal Studies Centre (ULSC) was established by the ESRC in 1999 and is the national resource centre for promoting longitudinal research and for the design, management and support of longitudinal surveys. Its goal is to ensure the collection of longitudinal data of the highest quality to meet UK social research needs and to promote its widest and most effective use. In achieving this, the centre makes a major contribution to the UK's portfolio of longitudinal studies and to the advances they help us make in advancing the social sciences and in understanding society. [More info: <http://www.iser.essex.ac.uk/ulsc> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils			

## Regulators

### Human Fertilisation and Embryology Authority (HFEA)



The HFEA is the UK's independent regulator overseeing the use of gametes and embryos in fertility treatment and research. The HFEA licenses and monitors UK fertility clinics and centres carrying out in vitro fertilisation (IVF), other assisted conception procedures and human embryo research. The HFEA are dedicated to licensing and monitoring UK research involving human embryos, and providing impartial and authoritative information to the public. [More info: <http://www.hfea.gov.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

### Human Tissue Authority (HTA)



The HTA is a regulator set up in 2005 following events in the 1990s that revealed a culture in hospitals of removing and retaining human organs and tissue without consent. The HTA is a watchdog that supports public confidence by licensing organisations that store and use human tissue for purposes such as research, patient treatment, post-mortem examination, teaching, and public exhibitions. They give approval for organ and bone marrow donations from living people. [More info: <http://www.hta.gov.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

### Medicines and Healthcare Products Regulatory Agency (MHRA)



The MHRA regulates medicines and medical devices in the UK. MHRA is an executive agency, sponsored by the Department of Health. The MHRA regulate within nine main areas; blood regulation and safety, clinical trials and investigations, good practice, inspections and enforcement, herbal and homeopathic medicine, import and export, manufacturing, wholesaling, importing and exporting medicines, marketing authorisations and licensing guidance, medical devices regulation and safety and vigilance, safety alerts and guidance. [More info: <http://www.gov.uk/government/organisations/medicines-and-healthcare-products-regulatory-agency> ]



Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## Learned Societies

### Academy of Medical Sciences



The Academy of Medical Sciences was founded in 1998 and is an independent body that represents medical science. Its interests range from research through clinical application to health care delivery. The Academy promotes excellence, influences policy, encourages the next generation of medical researchers, and links academia, industry and the NHS to translate medical science into benefits for society. [More info: <http://www.acmedsci.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Charity			

### British Psychological Society



The British Psychological Society promotes excellence and ethical practice in the science, education and practical applications of psychology. In 2012 the BPS had 49,678 members and subscribers in all fields of psychology. They support their members' careers and professional development by raising education and training standards. They also hold conferences and events in order to showcase work and enable networking. [For info: <http://www.bps.org.uk/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Social and economic sciences	 Regenerative Medicine	 Life Sciences

### Royal Society



Founded in 1660, the Royal Society is the National Academy of Science in the UK. A major activity of the Society is identifying and supporting the work of outstanding scientists. The Society supports researchers through its early and senior career schemes, innovation and industry schemes, and other schemes. The Society facilitates interaction and communication among scientists via its discussion meetings, and disseminates scientific advances through its journals. The Society also engages beyond the research community, through independent policy work, the promotion of high quality science education and communication with the public. [More info: <https://royalsociety.org/> ]







Location	Funding	Research area	Eight Great	Industrial Strategy
 UK		 Engineering  Biological and medical sciences  Physical, mathematical and computer sciences	 Advanced Materials	

## Royal Society of Chemistry



The Royal Society of Chemistry was formed in 1980 with the merger of four learned societies and has over 51,000 members. They are the UK's professional body for chemical scientists, supporting and representing their members and bringing together chemical scientists from all over the world. They invest in educating future generations of scientists and raise and maintain standards. They partner with industry and academia,

promoting collaboration and innovation. They also advise governments on policy. [For info: <http://www.rsc.org/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Academic  Private Sector	 Physical, mathematical and computer sciences	 Regenerative Medicine	 Life Sciences

## Society of Biology



The Society of Biology formed in 2009 by the merger of the Biosciences Federation and the Institute of Biology, the society has around 15,000 individual members, and over 100 member organisations. The society acts a single voice for biology: advising

Government and influencing policy; advancing education and professional development, supporting our members, and engaging and encouraging public interest in the life sciences. The Society represents a diverse membership of individuals, learned societies and other organisations. [For info: <http://www.societyofbiology.org/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences



## Funding Initiatives

### Clinical Research Infrastructure Initiative (CRII)



The CRII is providing capital and some recurrent funding throughout the UK for new research technologies in clinical studies including: 7T MRI, PET-MRI, hyperpolarised MRI and single cell genomic technologies. It is a partnership initiative between bodies including the Medical Research Council, Department of Health, Wellcome Trust, Cancer Research UK, British Heart Foundation, Arthritis Research UK and other Research Councils. The key objective is to support innovation – and specifically to fund novel equipment and capabilities that will most effectively advance the UK's ability to explore new areas in clinical research. 23 awards have been made to 18 universities and consortia, such as Genomics England (£24m), DPUK (£37m), and Stratified Medicine (£62.4m). [More info:

<http://www.mrc.ac.uk/news-events/news/230-million-for-technologies-to-revolutionise-research-into-disease/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy		
 UK	 Research Councils	 Charity	 Departmental	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences





### MRC-Industry Asset Sharing Initiative



Building on the MRC/ AstraZeneca Mechanisms of Disease Call in which 15 high quality experimental medicine grants were awarded, the MRC is now working with 7 industry partners (AstraZeneca, GSK, Johnson & Johnson, Lilly, Pfizer, Takeda and UCB) to provide researchers access to their deprioritised compounds. This initiative will

provide the pharma partners the opportunity to engage with the academic community across a range of disease areas that may fall outside their core focus. [More info:

<http://www.mrc.ac.uk/funding/browse/mrc-industry-asset-sharing-initiative/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy		
 UK	 Research Councils	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Regenerative Medicine	 Life Sciences

### Medical Bioinformatics Initiative investments



The Medical Bioinformatics Initiative has now made a total investment of £39.1m across six major strategic awards, aimed at strengthening collaborative links, improving tools and infrastructure for researchers and supporting the safe use of biological and patient data for medical research across all diseases. [More info: <http://www.mrc.ac.uk/news-events/news/medical-bioinformatics-science-minister-david-willetts-announces-32-million-towards-improving-data-research/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Synthetic Biology	 Life Sciences



## Leadership Forums and Networks

These are groups and networks, which help facilitate and co-ordinate materials research

### Association of British Healthcare Industries (ABHI)



The Association of British Healthcare Industries (ABHI) is the industry association for the medical technology sector in the UK. With over 250 company members, ABHI acts as the voice of the medical technology sector, championing industry to the NHS, Government, regulators and stakeholders in order to promote the rapid adoption of medical technologies in the UK. On an international level, ABHI advocated policies to provide 'an effective gateway to foreign markets'.

[More info: <http://www.abhi.org.uk/about/mission-statement.aspx>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences		 Life Sciences

### Association of the British Pharmaceutical Industry (ABPI)



The Association of the British Pharmaceutical Industry (ABPI) is the trade association for the research-based pharmaceutical industry in the UK representing over 150 companies both large and small which supply 90 per cent of all medicines used by the NHS, the ABPI is recognised by the government as the industry body negotiating on behalf of the branded pharmaceutical industry for statutory consultation requirements including the pricing scheme for medicines in the UK.

[More info: <http://www.abpi.org.uk/about-us/Pages/default.aspx> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences		 Life Sciences

### BioIndustry Association (BIA)



Founded in 1989, the BIA is at the forefront of UK bioscience, serving as its voice, connecting individuals and organisations. Their members are responsible for over 90% of biotech medicines currently in clinical development in the UK. In the last year, BIA members have taken forward pioneering research such as the first stem cell therapy clinical trials for stroke and the first drug to delay bone metastases in cancer. [More info: <http://www.bioindustry.org/home/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences		 Life Sciences

## British Healthcare Trades Association



The British Healthcare Trades Association was founded in 1917 and currently has 500 member companies employing over 17,000 people. The member companies make or sell assistive technology products that help people live more independently. All of their members sign up to their Code of Practice, demonstrating their commitment to high levels of customer care that go above and beyond their legal obligations, giving customers confidence. [More info: <http://www.bhta.net/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences		 Life Sciences

## British Medical Association






The British Medical Association, established in 1832, is the professional association and trade union for doctors in the UK. With over 150,000 members, the BMA provides both individual and collective support on employment issues, as well as lobbying on behalf of doctors for better health care. The BMA carries out research and publishes papers on key ethical, scientific and public health matters, as well as awarding grants to encourage individual research in medicine. [More info: <http://bma.org.uk> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences		 Life Sciences

## Faculty of Medical Leadership and Management



The Faculty of Medical Leadership and Management was established in 2011 to promote the advancement of medical leadership, management and quality improvement at all stages of the medical career for the benefit of patients. Consisting of around 2,000 members from all career stages, the Faculty aims to develop support tools and materials for members to improve their skills and knowledge base. [More info: <https://www.fmlm.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Charity			 Life Sciences

## Health Research Authority



The Health Research Authority (HRA) was established in December 2011 to promote and protect the interests of patients in health research and to streamline the regulation of

research. The HRA works to help create an environment where more money invested in research goes into carrying out relevant, good quality research. To deliver this, the HRA's strategic aims include leading improvements that make it easier to conduct good quality research in the UK, and improving efficiency and effectiveness of systems, and of advice and guidance.

[More info: <http://www.hra.nhs.uk/about-the-hra/who-we-are/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## London Regenerative Medicine Network



The London Regenerative Medicine Network (LRMN) is the UK's largest and most successful network on cell therapy, gene therapy and regenerative medicine. A not-for-profit organisation, the LRMN consists of over 6,000 members with the common aim

of the delivery of safe, efficacious therapies that can be affordably manufactured at scale for use in routine clinical practice. [More info: <http://lrnm.com/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK		 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## Medilink



Medilink UK is a national health technology business support organisation. It helps companies from concept through to commercialisation and nurtures collaborations between academics, clinicians and industry. As an international platform, Medilink UK supports global companies investing in the UK market as well as promoting the export of products and services to the US, Middle East and Asia. Medilink currently has 612 member

companies. [More info: <http://www.medilinkuk.com/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK		 Biological and medical sciences		 Life Sciences

## NIBSC



The National Institute for Biological Standards and Control (NIBSC) is a global leader in the characterisation, standardisation and control of biological medicines. NIBSC assures the quality of biological medicines worldwide through the provision of biological reference materials, by testing products and carrying out research. Their scientists provide scientific advice to a large number of organisations, including; manufacturers of biological medicines, national regulatory authorities and the UK government and European bodies. [For info: <http://www.nibsc.org/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

## NIHR Clinical Research Network



The role of the Clinical Research Network is to 'provide an infrastructure to make the research funded by the overall National Institute for Health Research, and its partners, "work" in the NHS context.' This, in practice, means aiding and supporting researchers in delivering clinical studies effectively by providing advice, streamlining bureaucracy, funding support staff, maintaining a knowledge base of

NHS sites to act as a resource for researchers, and assisting studies falling behind on recruitment targets.

[More info: <http://www.crn.nihr.ac.uk/about-crn/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## Nuffield Council on Bioethics

The Nuffield Council on Bioethics is an independent body that examines and reports on ethical issues in biology and medicine. It was established by the Trustees of the Nuffield Foundation in 1991, and since 1994 it has been funded jointly by the Foundation, the Wellcome Trust and the Medical Research Council. The Council has achieved an international reputation for advising policy makers and stimulating debate in bioethics. [For info: <http://nuffieldbioethics.org/>]



Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Private Sector  Academic	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

## One Nucleus



Established in 1997, One Nucleus is an international membership organisation for life science and healthcare companies. They are a not-for-profit membership organisation based in Cambridge with the majority of their members across the Cambridge/London corridor – at the heart of Europe's largest life science and healthcare cluster. The 470 member organisations of

One Nucleus include four of the UK's five Academic Health Science Centres and three of the world's top six Universities. [More info: <http://www.onenucleus.com/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 Global	 Private Sector  Academic	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

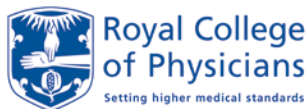
## Royal College of Nursing (RCN)



The Royal College of Nursing is a union membership organisation consisting mainly of registered nurses in the UK. RCN's activities include representing nurses and nursing and, through this, improving the quality of patient care. The RCN also helps to educate nurses professionally and academically, as well as help to develop the science of professional nursing practice. [More info: <http://www.rcn.org.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK		 Biological and medical sciences		 Life Sciences

## Royal College of Physicians



Established in 1518, the Royal College of Physicians (RCP) is a professional body of doctors of general medicine and its sub-specialities. The RCP's overall aims are to improve patient care and reduce illness. Consisting of 30,000 members worldwide across 30 different medical specialities, the RCP works to ensure that physicians are educated and trained to provide high-quality healthcare through accreditation and providing resources to its members. The RCP is a member of the UK Academy of Medical Royal Colleges. [More info: <http://www.rcplondon.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Charity	 Biological and medical sciences		 Life Sciences

## The Scientific and Medical Network



The Scientific and Medical Network is an educational charity delivering courses, events and publications on interdisciplinary ideas in science, medicine, philosophy

and spirituality. The worldwide community of members seeks to provide a safe forum for critical and open-minded discussion of ideas beyond conventional paradigms in science, medicine and philosophy. [More info: <http://www.scimednet.org/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Charity	 Biological and medical sciences		 Life Sciences  Education



## National Facilities and Equipment

These are facilities, which either exist for the use of national bodies or are available for the general use of the academic community.


### Academic Health Science Centres



In 2007 a review of healthcare recommended the creation of a number of Academic Health Science Centres. In October 2007 Imperial College Healthcare became the first AHSC to be established in the UK. The AHSCs currently in operation in the UK are; Cambridge University Health Partners, Imperial College Healthcare, King's Health Partners, Manchester Academic Health

Science Centre, Oxford Academic Health Science Network, UCL Partners and Health Science Scotland.

[For info: <https://www.gov.uk/government/news/top-nhs-and-university-alliances-recognised-by-department-of-health>]

Location	Funding	Research area	Eight Great	Industrial Strategy		
 UK	 Departmental	 Academic	 Biological and medical sciences	 Synthetic Biology	 Regenerative Medicine	 Life Sciences

### Academic Health Science Networks



Academic Health Science Networks (AHSNs) are membership organisations within the NHS in England. They were created in May 2013 with the aim of bringing together health services, and academic and industry members. Their stated purpose is to improve patient outcomes and generate economic benefits for the UK by promoting and encouraging the adoption of innovation in healthcare. [For info: <http://www.england.nhs.uk/ourwork/part-rel/ahsn/>]

Location	Funding	Research area	Eight Great	Industrial Strategy		
 UK	 Departmental	 Academic	 Biological and medical sciences	 Synthetic Biology	 Regenerative Medicine	 Life Sciences

### Biocity



Established in 2003 BioCity was one of the first Bioscience incubators offering state-of-the-art laboratories and commercial office space to let/rent, alongside business support and services to early stage companies in the life sciences sector. It provides homes and access to high-end equipment, shared services, training, business support and access to investment for new and growing bioscience businesses.

Nearly 200 companies are based in a BioCity business incubator, making the BioCity network one of the largest concentrations of life science businesses in the UK. [More info: <https://www.biocity.co.uk/>]

Location	Funding	Research area	Eight Great		Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences	 Synthetic Biology	 Regenerative Medicine	 Life Sciences

## Biomedical Research Centres and Units









Biomedical Research Centres (BRCs) are collaborations between an NHS Trust and an HEI with an emphasis on translational research in biomedicine. There are currently 11 BRCs in the UK who received £677 million of funds from the NIHR for 2012 to 2017. Biomedical Research Units (BRUs) were funded to create partnerships between NHS Trusts and HEIs that conduct translational research in priority areas of high disease burden and clinical need. From April 2012 twenty BRUs across England received £127 million worth of funds for 2012 to 2017. [More info: <http://www.nihr.ac.uk/about/nihr-infrastructure.htm> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental  Academic	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

## Central Laser Facility (CLF)










The Central Laser Facility (CLF) is a partnership between its staff and the large number of members of UK and European universities who use the specialised laser equipment provided to carry out a broad range of experiments in physics, chemistry and biology. [More info: <http://www.stfc.ac.uk/clf/default.aspx> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Academic	 Engineering  Biological and medical sciences	 Advanced Materials	

## Diamond Light Source



Diamond is the UK's synchrotron, and underpins fundamental structural biology research, and plays a key role in the support of biomedical research. Pharmaceutical companies and academic researchers are making increasing use of macromolecular crystallography. Improvements in the speed of data collection and solving structures mean that it is now possible to obtain structural information on a timescale that allows chemists and structural biologists to work together in the development of promising compounds into drug candidates. [More info: <http://www.diamond.ac.uk/Home.html> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Departmental	 Engineering  Physical, mathematical and computer sciences  Biological and medical sciences	 Advanced Materials	



## High-Throughput Sequencing Hubs at Edinburgh and Liverpool



The MRC currently supports two high-throughput sequencing hubs with associated technical and bioinformatics support. This investment facilitates access to cutting-edge equipment and dedicated technical and bioinformatics expertise to allow biomedical and clinical

researchers to fully realise the potential of these approaches. [More info:

<http://www.mrc.ac.uk/research/facilities/high-throughput-sequencing-hubs/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

## Imanova



Imanova is a translational imaging centre with expertise in state-of-the-art molecular imaging techniques, preparation of radiopharmaceuticals, and supporting drug development and clinical trials. In particular Imanova specialises in employing positron emission tomography (PET) and magnetic resonance imaging (MRI) scanning techniques to reduce risk in early drug development and help improve disease understanding. Its capabilities include:

- Consultation on imaging studies and support in study design
- Development and assessment of new positron emission tomography (PET) tracers and magnetic resonance imaging (MRI) techniques
- Applying imaging sciences to drug development to reduce in early drug development
- Analysing and interpreting the results from imaging studies using bespoke analysis tools

[More info: <http://www.imanova.co.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Academic  Private Sector	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences






## Medcity



MedCity is a partnership between UCLPartners, King's Health Partners, Imperial College AHSC, Oxford, Cambridge and the Greater London Authority. MedCity is currently funded by its founding members (King's Health Partners, Imperial College Academic Health Science

Centre, UCLPartners) and the Mayor of London. They are aiming to build a more entrepreneurial culture in the UK - championing new areas of collaboration, and fostering a commercial mind-set in the research and clinical community. [More info:

<http://www.medcitylondon.com/>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental  Academic	 Biological and medical sciences	 Synthetic Biology  Regenerative Medicine	 Life Sciences

## MRC-NIHR National Phenome Centre








The MRC-NIHR Phenome Centre offers capability in targeted and exploratory high-throughput metabolic phenotyping; assay development; and computational medicine capability for the provision of data, models and interpretation. It provides, at scale,



### National Institute for Health Research







the ability to analyse both patient- and population-based samples for biomarker discovery and validation, improved patient stratification through development of robust diagnostic and prognostic markers, and early identification of drug efficacy and safety and other responses to treatments. The Centre is funded over five years, until 2017-18, through an investment of £5 million each from the Medical Research Council and the NIHR. [More info: [www.imperial.ac.uk/phenomecentre/](http://www.imperial.ac.uk/phenomecentre/)]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Departmental	 Biological and medical sciences	 Life Sciences

## MRC-Wellcome Trust Human Developmental Biology Resource (HDBR)



The MRC/Wellcome Trust HDBR (HDBR) is a national human tissue resource for medical research. Supported by the Medical Research Council and the Wellcome Trust, it is based at the Institute of Child Health, London, and the Institute of Genetic Medicine, Newcastle upon Tyne. The HDBR collects, stores and distributes human embryonic and foetal tissue, donated through elective terminations, for research. [More info: <http://hdbr.org/>]





Location	Funding	Research area	Eight Great	Industrial Strategy	
 UK	 Research Councils	 Charity	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## NIHR National Biosample Centre



### National Institute for Health Research



The NIHR National Biosample Centre was launched in January 2015 to provide high throughput and high quality biosample processing, storage and retrieval services to support National Institute for Health Research-supported research, and research funded by DH partners. These partners include publicly-funded research funders (e.g. MRC), charities (e.g. Wellcome, CR-UK), and industry. [More info: <http://www.nihr.ac.uk/documents/about-NIHR/Briefing-Documents/4.14-NIHR-National-Biosample-Centre.pdf>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## NIHR BioResource

# National Institute for Health Research

The NIHR BioResource is a collaborative initiative which builds on the significant investment in NIHR Biomedical Research Centres and Units. It provides a national cohort of healthy patients, their relatives and volunteers who are willing to provide clinical information and samples that will enable them to be recalled by genotype and phenotype for early translational (experimental medicine) research studies and early phase trials. [More info: <http://www.nihr.ac.uk/about/bioresource.htm>]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Departmental	 Biological and medical sciences		 Life Sciences

## Stratified Medicine Consortia





The MRC's Stratified Medicine Initiative has developed and funded UK-wide research consortia each focussed on a specific disease with an existing therapy or therapies which produced different responses in patients. These consortia aim to identify and analyse patients to better direct therapy and to gain a deeper understanding of the differing mechanisms of disease and treatment responses. A further £62.4m in capital funds will support stratified medicine research through the 2014 CRI initiative. [More info: <http://www.mrc.ac.uk/news-events/news/mrc-invests-over-10m-in-stratified-medicine-research/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

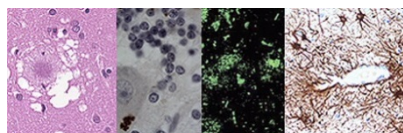
## UK Biobank



UK Biobank is a major national resource for health research, with the aim of improving the prevention, diagnosis and treatment of a wide range of serious and life-threatening illnesses – including cancer, heart diseases, stroke, diabetes, arthritis, osteoporosis, eye disorders, depression and forms of dementia. Funded primarily by the MRC and the Wellcome Trust, UK Biobank recruited 500,000 people aged between 40-69 years in 2006-2010 from across the country to take part in this project. [More info: <http://www.ukbiobank.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils  Charity	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## UK Brain Banks Network

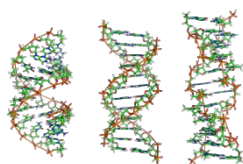


The MRC has led an initiative that established an independent and coordinated UK Network of Brain Tissue Banks. The UK Brain Banks Network will provide high quality brain tissue to scientists and clinicians to carry out cutting edge neurosciences research, and will support major

initiatives on research into neurological disorders, including the aims of the Ministerial Action Group on Dementia Research. [More info: <http://www.mrc.ac.uk/research/facilities/brain-banks/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## UK DNA Banking Network



The MRC's national DNA Banking Network is a project to collect, store and study DNA samples from tens of thousands of healthy volunteers and patients with diseases of major public importance. It aims to identify genes that are risk factors for the conditions. [More info: <http://www.mrc.ac.uk/research/facilities/uk-dna-banking-network/> ]








Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## UK Science Parks Association



Founded in 1984 the UK Science Park Association has 105 member science parks in the UK. Members of UKSPA provide environments for technology entrepreneurs, start-ups and University Spin Out companies alongside growing and more mature tech

businesses. The 105 member parks of the UKSPA provide the environment for 4000 companies employing around 75,000 people to grow and succeed. [More info: <http://www.ukspa.org.uk/>]

Location	Funding	Research area		Eight Great		Industrial Strategy
 UK	 Private Sector	 Biological and medical sciences	 Physical, mathematical and computer sciences	 Synthetic Biology	 Regenerative Medicine	 Life Sciences

## UK Stem Cell Bank



Jointly funded by the MRC and the Biotechnology and Biological Sciences Research Council, the UK Stem Cell Bank was established in 2002 to store, characterise and supply ethically-approved, quality-controlled stem cell lines for medical research and treatment, with a focus on human embryonic stem cell lines

(hESC). [More info: <http://www.mrc.ac.uk/research/facilities/stem-cell-bank/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 UK	 Research Councils	 Biological and medical sciences	 Regenerative Medicine	 Life Sciences

## International Facilities

Facilities which are either partly funded by UK institutions or important to UK research.

### ELIXIR











ELIXIR (the European life-sciences Infrastructure for biological Information) is an initiative that will allow life science laboratories across Europe to share and store their research data as part of an organised network. Its goal is to orchestrate the collection, quality control and archiving of large amounts of biological data produced by life science experiments. ELIXIR is creating an infrastructure that integrates data to ensure a seamless service that is easily accessible to all. [More info: <http://www.elixir-europe.org/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 European	 Biological and medical sciences	 Synthetic Biology	 Life Sciences

### ESRF European Synchrotron Radiation Facility



Based in Grenoble, France the ESRF is a stadium sized machine that produces beams of bright X-ray light which are guided through a set of lenses and instruments called a beamline. There are over 40 specialised experimental stations in the X-ray light beamlines, physicists work side by side with chemists and materials scientists. Biologists, medical doctors, meteorologists, geophysicists and archaeologists have become regular users. Companies also send researchers, notably in the fields of pharmaceuticals, consumer products, petrochemicals and microelectronics. The ESRF is supported and shared by 21 countries. [More info: <http://www.esrf.eu/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 European  Private Sector	 Engineering  Physical, mathematical and computer sciences  Biological and medical sciences	 Advanced Materials  Synthetic Biology	

### European Bioinformatics Institute



EMBL-EBI provides freely available data from life science experiments, performs basic research in computational biology and offers an extensive user training programme, supporting researchers in academia and industry. About 20% of EMBL-EBI is devoted to collaborative, investigator-led research using computational approaches to unravel the secrets of life. Much of their work is related to problems of direct medical significance. [More info: <http://www.ebi.ac.uk/> ]

Location	Funding	Research area	Eight Great	Industrial Strategy
 EU	 European	 Biological and medical sciences	 Synthetic Biology	 Life Sciences